### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 13.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005836 Address: 333 Burma Road **Date Inspected:** 23-Mar-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1600 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Oregon Iron Works Clackamas, Or. **Location:** Clackamas, Oregon

**CWI Name:** See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Hinge K Pipe Beams

## **Summary of Items Observed:**

On this date, Caltrans Quality Assurance Inspector (QA) Sherri Brannon is present at the Oregon Iron Works, Inc. (OIW) jobsite in Clackamas, Oregon for the purpose of observing fabrication of the Hinge K Pipe Beams.

#### OIW Fabrication Shop-Bay 3:

QA Inspector Brannon randomly observed OIW qualified welder Mr. Rick Hinkle ID#H49 tack welding joining half fuse section MK#a124-7 (HPS485 W) to half fuse section MK#a124-6 (HPS485 W). The complete joint penetration (CJP) weld is identified as weld joint #WM3-18. Mr. Hinkle was observed welding in the 1G (flat) and 3G (vertical) positions utilizing flux corded are welding (FCAW) process with a .045 inch (1.2mm) diameter electrode, filler metal brand Hobart Fabco 91K2-C class 91T1-K2J semi-automatic. The above .045 inch (1.2mm) diameter electrode was verbally approved to use for tack welding on 03-18-2009.

### OIW Fabrication Shop-Bay 3:

QA Inspector Brannon randomly observed OIW qualified welder Mr. Craig Jacobson ID#J6 air carbon arc gouging and grinding forging sectionMK#a111-1 (A508 Gr. 4N Class 2) to base plate MK#a110 (HPS 485 W) in preparation for submerged arc welding (SAW) process. The complete joint penetration (CJP) weld is identified as weld joint #W2-13.

#### OIW Fabrication Shop-Bay 3:

OIW QC Inspector Mike Gregson informed QA Brannon that on 03-17-09 OIW used Hobart Fabco 91K2-C class 91T1-K2J .045 inch (1.2mm) diameter electrode, flux cored arc welding (FCAW) process. The Hobart Fabco 91K2-C class 91T1-K2J .045 inch (1.2mm) diameter electrode was used to repair approximately 10 inches of

# WELDING INSPECTION REPORT

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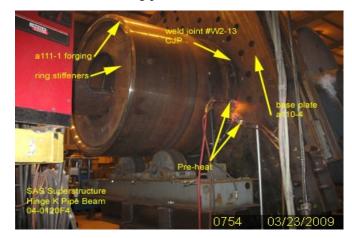
undercut found during QC visual inspection at ring stiffener MK#a125 to fuse half section MK#a124-6 weld joint WM3-03. QA Inspector Brannon informed Lead QA Inspector Mr. Joe Adame.

Material, Equipment, and Labor Tracking:

QA Inspector Brannon performed a verification of personnel at OIW. QA Inspector Brannon observed 2 Supervisor's, 2 Quality Control and 3 production personnel on this date.

The following digital photograph below illustrates observation of the activities being performed.





# **Summary of Conversations:**

No relevant conversations on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Brannon,Sherri	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer